



HM Nautical Almanac Office Mathematician / Astronomer (JVB B2)

HM Nautical Almanac Office (HMNAO) has been producing almanac data for nearly 180 years with a heritage going back to 1767. It is one of a small number of groups around the world with a global reputation for producing accurate information for users of astronomical data. HMNAO is part of the United Kingdom Hydrographic Office (UKHO), having responsibility for delivering not only *The Nautical Almanac* but astronomical data for a wide range of people, including astronomers, mariners, aviators, surveyors, the Armed Forces, the Police, lawyers, religious groups, architects, schools, diary and calendar manufacturers, photographers and film crews. In fact, anyone requiring information relating to the positions of the Sun, Moon, planets and stars at a particular time may require our services.

UKHO plays a vital role in the UK's maritime defence capability and supporting safe navigation at sea. As an agency of the MOD and a world-leading supplier of navigational charts and publications to the worldwide maritime community, we are at the forefront of hydrographic digital product and service development.

THE ROLE

Familiarity with astronomical calculations and data – producing almanacs, other printed material and web-related services; your insight will be valued across the astronomical community. Your experience will allow you to develop an in-depth understanding of timescales, reference frames, phenomena and refraction such that what matters to our customers is delivered with a high level of precision and accuracy. Thus your comfort with theoretical concepts must be more than academic, but must be applicable to the delivery of respected products and services. This is a highly specialised post for which you must have a strong, demonstrable track record in applied mathematics and the ability to interpret detailed scientific material. You must also have software programming skills demonstrating the ability to learn how to maintain and enhance HMNAO bespoke systems leading to significant opportunities to develop new digital applications and to present HMNAO data in more dynamic ways on the web. Developing ideas and methodologies will be encouraged, particularly through our strong collaboration with the US Naval Observatory.

ABOUT YOU

Essential Skills/Qualifications:

- Degree level mathematics (e.g. numerical analysis, vector/matrix manipulation)
- Astronomy knowledge / experience
- Proven software development experience (knowledge of Fortran is an advantage)
- Ability to take theoretical concepts and translate them into algorithms and practical applications
- Clear written English and document preparation skills (knowledge of TeX is an advantage)

Personal Attributes:

- Ability to work in a small, close-knit, technical team
- Passion for numerical data for astronomy / navigation
- Flair in the handling and presentation of numerical data
- Tenacity in generating solutions to user requirements
- Dedication to accuracy and attention to detail

For details of how to apply go to <http://www.ukho.gov.uk>, and select "about us" and "careers".